

## 8 Port HD/SD-SDI Video Switch with 2 Port Splitter

### User's Guide



Models  
SW-HDSDI-8X2

# HD-SDI



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## Section 1: Getting Started

### 1.1 Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

#### What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - Repair or attempted repair by anyone not authorized by us.
  - Any damage of the product due to shipment.
  - Removal or installation of the product.
  - Causes external to the product, such as electric power fluctuation or failure.
  - Use of supplies or parts not meeting our specifications.
  - Normal wear and tear.
  - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

### 1.2 Safety Instructions

The Avenview SW-HDSDI-8X2 HD/SD-SDI Matrix Switch has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the SW-HDSDI-8X2 should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Do not dismantle the housing or modify the module.
- Dismantling the housing or modifying the module may result in electrical shock or burn.
- Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Have the module checked by a qualified service engineer before using it again.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

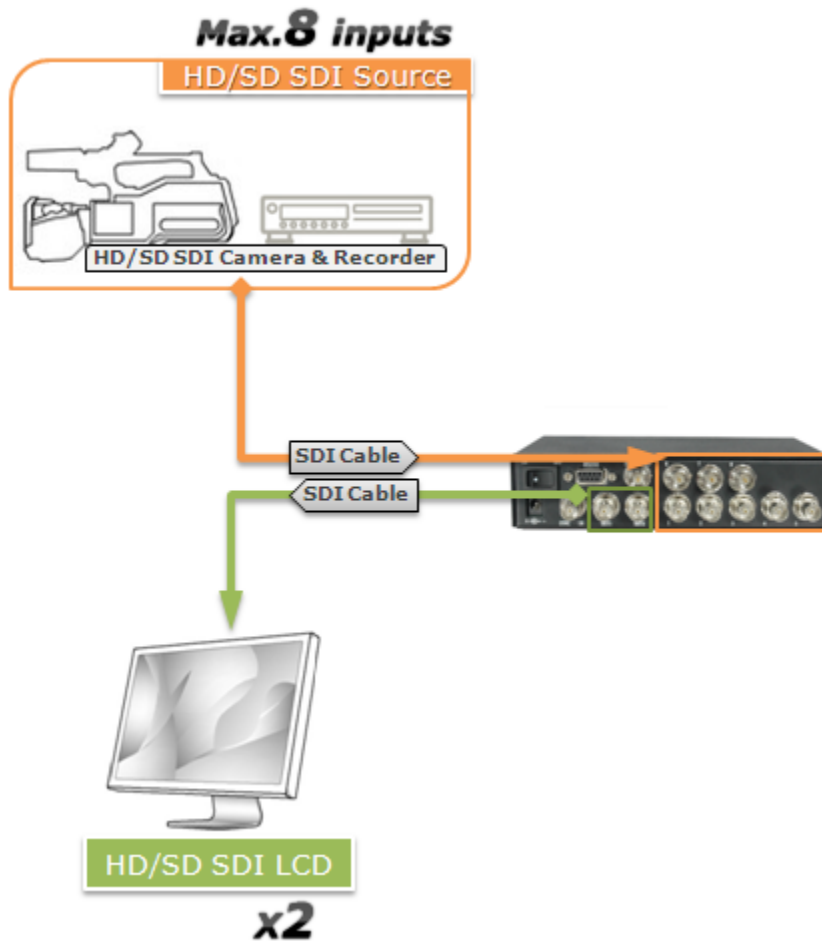
### 1.3 Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

### 1.4 Introduction

The Avenview SW-HSDSI-8X2 receives and equalizes up to 8 SDI inputs, perfectly switches the desired input to SDI equipped monitors or receivers. The switch supports both HD/SD-SDI bit rates. Through RS-232, IR remote, or front panel push button, the control of the SDI switch becomes versatile and easier. By perfectly duplicating the chosen SDI input, this SDI switch provides two identical outputs, and acts like a SDI splitter. SW-HSDSI-8X2 offers the most convenient and cost effective means for swift switch and duplication of high quality SDI in the market..



## 1.5 Features

- HD/SD-SDI Switch
- Up to 8 equalized SDI inputs
- Dual Color LED indication of HD/SD of the output SDI
- Automatic detection of the SDI Input
- Synchronizes input/output (switch after vertical sync)
- Low-cost 8x2 HD/SD (dual-rate) switch with dual outputs
- Provides the equalized transmission path up to 300m (1000ft) at SD-SDI or 150m (500ft) at HD-SDI
- Multiple control by RS-232, IR remote, and push button
- Easy installation

## 1.6 Package Contents

Before you start the installation of the converter, please check the package contents.

- SW-HSDI-8X2 x 1
- Power Adapter (+5VDC) x 1
- IR Remote Control x 1
- User's Manual x 1

## 1.7 Before Installation

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.

## 1.8 Panel Description

### FRONT PANEL



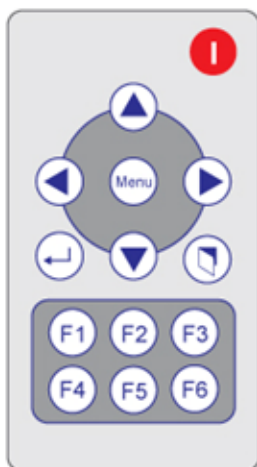
1. Input Channel LED	2. Input Channel Auto Detection LED
3. Output HD/SD Detection LED	4. IR Remote Receiver
5. Power Indicator LED	6. Push Button for Input Channel Switch

### REAR PANEL





7. Power Switch	8. 5V DC Power Jack
9. Synchronized SDI Signal Input	10. RS232 Port
11. SDI Output	12. Synchronized Signal Loop-Out (add 75Ω terminator if nothing connected)
13. SDI Input	

## 1.9 IR Remote Control





: Reserved

: Reserved


: Reserved


: Reserved


: To the left


: To the right


: Channel 1

: Channel 2


: Channel 3

: Channel 4

: Channel 5

: Channel 6

: Channel 7

: Channel 8



## Section 2: Installation

Follow these instructions for installation of SW-HDSDI-8X2:

1. Connect a SDI device to the output of SW-HDSDI-8X2
2. Connect the SDI input sources to the inputs of SW-HDSDI-8X2
3. Plug power adapter cable into 5V DC power jack
4. Use IR remote, front panel push button or through RS232 to switch between input channels





### Section 3: Specifications

Item	Description
<b>Model</b>	SW-HDSDI-8X2
<b>SDI Standards</b>	SD-SDI & HD-SDI
<b>Auto HD/SD-SDI Detection</b>	Yes
<b>Supported Protocols</b>	SMPTE 259M, SMPTE 292M
<b>Video Bandwidth</b>	Single Link: 1.485Gpbs & 1.485/1.001Gpbs
<b>Data Rates</b>	143 / 270 / 1483 / 1485 Mbps
<b>Supported Video</b>	HD: 720p 50/59.94/60, 1035i 50/59.94/60, 1080i 50/59.94/60, 1080p 24/30 SD: NTSC@59.94Hz, PAL@50Hz
<b>Output impedance</b>	75Ω
<b>Reclocking function</b>	No
<b>Cable equalization</b>	HD-SDI: up to 150m (500ft) SD-SDI: up to 300m (1000ft)
<b>Audio support</b>	Yes
<b>RP-918 pathological patterns</b>	Immune
<b>Input Connectors</b>	8x BNC (SDI)
<b>Output Connectors</b>	2x BNC (SDI)
<b>BNC connector</b>	75Ω inter-locked socket
<b>Eye pattern characteristics</b>	Amplitude: Within 800mV ±3% (<10%) Rise overshoot: Less than 2% (<10%) Fall overshoot: Less than 2% (<10%) Long time jitter: 0.195μ (<1.0μ) Timing jitter: 0.195μ (<1.0μ) Alignment jitter: 0.127μ (<0.2μ)
<b>Dimensions</b>	7.4" x 4.9" x 1.7" (L x W x H)
<b>Weight</b>	890g (2lbs)
<b>Power Supply</b>	5V 4A DC
<b>Power Consumption</b>	10 Watts (max)
<b>Operating Temperature</b>	0~40°C [32~104°F]
<b>Storage Temperature</b>	-20~60°C [-4~140°F]
<b>Relative Humidity</b>	20~90% RH [no condensation]



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